# Corey Staten

http://coreystaten.com/ corey.staten@gmail.com | (614) 259-8118

### **EXPERIENCE**

# **REINFORCEMENT LEARNING GRANT** | FROM THE MACHINE INTELIGENCE RESEARCH INSTITUTE July 2018 - September 2018

- Implemented and debugged reinforcement learning algorithms in TensorFlow, including: vanilla policy gradient, A2C, proximal policy optimization, and deep Q-networks + variants.
- Studied the reinforcement learning literature, focusing on the most influential papers from the last few years.

#### **GRADUATE STUDENT** | THE OHIO STATE UNIVERSITY

September 2014 - May 2018

- Described new algorithms for higher-dimensional pathfinding in certain computads as part of a PhD thesis on higher-dimensional rewriting theory.
- Wrote and released a python library, CatComputad, implementing thesis algorithms.

#### **CONSULTANT** | SELF-EMPLOYED

February 2013 - August 2014

- Designed and built a web platform(WEx) for peer review of writing assignments, used by thousands of students in multiple runs of a massive online course by the English department at Ohio State University.
- Provided project management, development, and support services to the WEx team in the English department, including: deployment, database management, integration with existing systems, and coordination with separate technology and accessibility teams at OSU.
- Helped design and build initial versions of Ximera, a web platform for interactive mathematics course materials.
- Worked with OSU's Office of Disability Services to increase features and accessibility of the AblePlayer media player.

#### PROGRAMMER | CALLCOPY

March 2011 - February 2013

- Researched and developed the core technical components for a new workforce management product, including call volume forecasting, simulation, and employee scheduling.
- Did full-stack development of web applications and telephony device integrations.

## **FDUCATION**

THE OHIO STATE UNIVERSITY | Ph.D. IN MATHEMATICS, AUGUST 2018 | M.S. IN MATHEMATICS, MARCH 2011 | B.S. IN MATHEMATICS, JUNE 2009

SKILLS

#### **DOMAINS**

Reinforcement Learning Mathematical Software Full-stack Development Research Capability

#### **KEY TECHNOLOGIES**

Python TensorFlow Haskell JavaScript